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(54)

Cooling air inlet configuration for a blade root

(57) An improved attachment air inlet configuration for a turbine blade comprises a plurality of inlets 39 in the blade root, each inlet being non-circular and having a major axis substantially normal to a root portion centre plane 41. This arrangement reduces attachment rib concentrated stresses in highly loaded, single crystal tur-

bine blades that cause cracking in conventional blade inlet configurations. It also desensitizes rib concentrated stresses to variations in secondary crystal orientation, permitting highly loaded single crystal blades to have random secondary crystal orientation for lower cost, or seed with any secondary orientation needed to solve other blade or manufacturing problems.

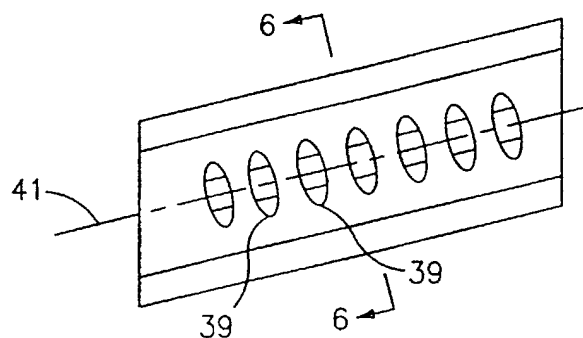


FIG. 5



European Patent
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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 November 2003	Examiner Iverus, D
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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